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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,725	04/15/2004	Jutta Lindemann	63665.00001	8868

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EXAMINER	
CHEUNG, WILLIAM K	

ART UNIT	PAPER NUMBER
1713	

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/825,725	LINDEMANN, JUTTA	
	Examiner	Art Unit	
	William K. Cheung	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) *22-25* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *051704, 122705*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-25 are pending. Claims 22-25 are drawn to non-elected subjected matter. Claims 1-21 are examined with merit.

2. In admission by applicants that the information disclosure statement filed May 17, 2004 does not belong to instant application, the information disclosure statement filed May 17 is not considered.

3. The examiner acknowledges the receipt of the information disclosure statement filed December 27, 2005 and the references cited have been considered.

4. In view of amendment filed December 27, 2005, the rejection of claims 1-21 under 35 U.S.C. 103(a) as being unpatentable over Makino et al. (US 6,552,130 B1), is withdrawn.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makino et al. (US 6,552,130 B1) in view of Borden et al. (US 6,211,259).

The invention of claims 1-21 relates to a ***(meth)acrylate resin*** *comprising:*

20-85 % *by weight* ***(meth)acrylate***

10-40 % *by weight of a* ***polymer*** *soluble in (meth)acrylate*

0.1-2 % *by weight* ***paraffin***

0-50 % *by weight* ***hydroxyl(meth)acrylate; and***

0.1-2 % *by weight* ***adhesion promoter****, wherein the adhesion promoter is a phosphoric ester.*

Makino et al. (abstract; col. 12-23, working examples, Tables and comparative examples; col. 23, claims 1-5) disclose methacrylate resin compositions that are very

similar to the resin composition as claimed. Makino et al. (col. 12, line 20-26) disclose a composition comprising MMA, TEGDMA, and at mixture paraffin waxes having different melting points as claimed). Regarding the claimed adhesion promoter, Makino et al. (col. 10, line 3) clearly indicate the use of silane coupling agent for improving the bonding strength of resin with the fillers. Regarding the claimed stabilizer, Makino et al. (col. 10, line 15-20) clearly disclose using 2,4-dimethyl-t-butylphenol for improving storage stability. Makino et al. (col. 10, line 38-49) teach the incorporation of pigment and dye to the disclosed resin composition. Makino et al. (col. 19, line 20-32) disclose the composition comprising the use of benzoyl peroxide with dimethyl p-toluidine as accelerator. Makino et al. (col. 10, line 14) also disclose using defoaming agents.

The difference between the invention of claims 1-21 and Makino et al. is that Makino et al. are silent on a single embodiment comprising a hydroxyl (meth)acrylate. Regarding claims 14-15, the further difference between the invention of claims 14-15 with Makino et al. is that Makino et al. are silent on the specific combination of primary and secondary stabilizers as claimed.

Regarding the claimed "hydroxyl(meth)acrylate", Makino et al. (col. 3, line 19-48) disclose a list of functionally equivalent (meth)acrylic acid ester for the disclosed composition. Motivated by the expectation of success of obtaining resin system that can be cured by redox-type polymerization initiator (col. 1, line 26-32), it would have been obvious to one of ordinary skill in art to use a mixture of the disclosed list of functionally

equivalent (meth)acrylic acid ester to obtain the invention of claims 1-19, 21. According MPEP 2144.07, "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (citations omitted) (Claims to a process of preparing a spray-dried detergent by mixing together two conventional spray-dried detergents were held to be prima facie obvious.). See also In re Crockett, 279 F.2d 274, 126 USPQ 186 (CCPA 1960) (Claims directed to a method and material for treating cast iron using a mixture comprising calcium carbide and magnesium oxide were held unpatentable over prior art disclosures that the aforementioned components individually promote the formation of a nodular structure in cast iron.); and Ex parte Quadranti, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992) (mixture of two known herbicides held prima facie obvious). But see In re Geiger, 815 F.2d 686, 2 USPQ2d 1276 (Fed. Cir. 1987).

Regarding claims 14-15, since Makino et al. (col. 10, line 15-20) clearly disclose using 2,4-dimethyl-t-butylphenol for improving storage stability. Motivated by the expectation of success that the disclosed composition can be benefited from using a stabilizer, it would have been obvious to one of ordinary skill in art to look for other stabilizer, especially the combination use of common primary and secondary stabilizers

such as the ones as claimed from the major additive suppliers for further stabilization improvement to obtain the invention of claims 14-15.

Regarding claim 20 which claims the viscosity of the obviated composition, in view of substantially identical composition between the composition of claim 20 and the obviated composition of Makino et al., the examiner has a reasonable basis to believe that the claimed viscosity of claim 20 is inherently possessed in Makino et al. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

The difference between the invention of claims 1-21 and Makino et al. is that silent on a composition comprising phosphoric acid esters.

Borden et al. (col. 15, line 66 to col. 16, line 47) disclose the advantages of using phosphoric and polyphosphoric acid esters to enhance the adhesion properties of composite materials. Therefore, motivated by the expectation of success of improving the adhesion properties of composite materials, it would have been obvious to one of ordinary skill in art to incorporate phosphoric or polyphosphoric acid esters into the composition of Makino et al. to obtain the invention of claims 1-21.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K. Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William K. Cheung, Ph. D.

Primary Examiner

February 9, 2006

WILLIAM K. CHEUNG
PRIMARY EXAMINER